## "Corkscrew and Blowtorch"

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Following the flamethrower's debut on Guadalcanal in 1943, the Marine Corps found the effectiveness of spewing streams of fire into well-fortified enemy positions so great that the number of flamethrowers authorized for a division grew from 24 in 1943 to 243 in 1944. On Iwo Jima, Marine flamethrowers served in demolition teams. Tactically, when combating a Japanese stronghold, a Marine "pin-up" team consisting of a bazooka, 2 automatic riflemen, and an M-1 rifle would direct heavy fire against a target. Once a base of fire was laid, the demolition



teams were sent in. One team was armed with various explosives or bangalore torpedoes; the other team had 2 flamethrowers, which in turn was protected by two riflemen. The infantry tactic became known as the "corkscrew and blowtorch" method. However, the assignment as a flamethrower operator was understandably not popular and many suffered psychologically thereafter.

Left: Flamethrower from "E" Company, Ninth Marines, on Iwo Jima.

Photo: USMC

The use of fire as an instrument of war was not a novel concept. "Greek fire," invented in 660 A.D., floated on water and was particularly effective in naval operations. The Germans first employed flamethrowers during World War I against the French at Malencourt, and by 1916, Britain and France had fielded flamethrowers as well. Prior to the armistice and during the inter-war period, the U.S. remained aloof from chemical weapons development. Not until 1940, after the Germans employed flamethrowers in Poland, Belgium, and France, did the Secretary of War direct the development of flamethrowers for the U.S. military. As refined models with better capabilities were developed, the concept of propelling a jellied oil of thick fuel that splattered and stuck to targets at ranges over 60 yards endured until the early 1970s, when rocket powered flame weapons provided greater standoff capabilities, such as the 4-barrel M202 rocket launcher, the M72 LAW, and MK 153 SMAW.

Recognizing the terrain similarities in Afghanistan to volcanic islands formations in the Pacific, the Marine Corps Combat Development Center contacted the History and Museums Division for information about the

organization and employment of flamethrowers, for their possible reintroduction as a combat weapon. While the test-phase proved disappointing and the revival was not recommended, the Marine Corps is now considering alternative flame weapons systems, such thermobaric systems. Thermobaric weapons belong to a new class of fuel-rich compositions that release energy over a longer period of time (more so than standard explosives). When detonated in confined spaces, a chemical reaction causes a vigorous evolution of heat, pressure, and flame or spattering of burning particles as the warhead cloud expands.<sup>1</sup>

The war in Afghanistan, where Marines faced an enemy that was operating from an extensive network of tunnels and caves, revealed that an effective weapon, such as the flamethrower, was no longer available. The expedient consideration and testing of the now 59-year old flamethrower concept reasserts the value of the History and Museums



Division that provided important documentation to evaluate the systems' concept.

Above: A.A.F. Hq., Quantico, Virginia 1941. Marine officers inspect a pill box after being hit by a flamethrower. In the background on the right, the old brig and now the Museums Branch Research Facility.

Photo: USMC Museum

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<sup>&</sup>lt;sup>1</sup> Deflagration is defined by the Harcourt Academic Press Dictionary of Science and Technology as a rapid combustion process that gives off heat and light. Also consulted was the Defense Threat Reduction Agency (DoD).